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*SAVING TO SAVE THE PLANET: THE
CARBON FOOTPRINT OF MONEY
AN ENVIRONMENTAL ANALYSIS OF TRADITIONAL AND ETHICAL
SPENDING, SAVING AND INVESTMENT*

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This report was produced during a micro-internship with the Abingdon Carbon Cutters.

There were two principal goals to this research:

- (1) Determine an estimate of the carbon footprint of spending, saving and investing money
- (2) Identify what makes an ethical savings account or investment fund more environmentally friendly than a traditional account/fund

Financial activities are easy to overlook when thinking about carbon footprints; the focus tends to be on the environmental impact of goods and services, not the process that led to obtaining those goods and services. However, this leads to a lot of emissions being concealed and ignored. This report aims to provide a clearer picture of the environmental impact of money, whether it is spent, saved or invested. It should thus allow anyone interested to more accurately estimate their own carbon footprint and provide some guidance for how they could go about reducing it.

The carbon footprint of spending money

There are two components that determine the carbon footprint of spending money:

- 1.) The carbon footprint of **the process of spending money**
This is usually done by either a.) exchanging physical money b.) a card transaction or c.) an online transaction
- 2.) The carbon footprint of **the good or service** the money is exchanged for

The carbon footprint of the process of spending money

a.) Physical money

In order to produce a bank note, raw materials need to be gathered then manufactured into the final product. According to a study by the Bank of England, producing 1000 £10 notes resulted in a carbon footprint of 31kg CO₂e.^{1, 2}

These notes then also need to be put into circulation; this is usually done by an ATM. Further emissions are thus generated from running the ATM, and from transporting the note to the ATM. The note will also be used in many transactions over its lifetime (an estimated 10 years), incurring further ATM running and transport costs depending on its transaction velocity, or the rate at which it is used. There will also be disposal costs at the end of its lifetime.

This increases the carbon footprint per 1000 £10 notes to 436kg CO₂e over 10 years. It should be noted that the carbon footprint of 1000 £5 notes is significantly smaller at 157kg CO₂e, despite similar production costs, due to differences in transaction velocity.

I will be using the £10 figures in further calculations and comparisons. £50 notes have the smallest transaction velocity by far, followed by £5 notes, then £10 notes, then £20 notes.³ Thus, eliminating £50 notes as an outlier, £10 notes have the median transaction velocity. Moreover, all denominations will soon be polymer, so analysing the still paper £20 note would limit the time frame in which the figures would remain relevant.

¹ Upon introducing polymer notes, the Bank of England commissioned a report to determine if they were better for the environment than paper notes – they are: <https://www.bankofengland.co.uk/-/media/boe/files/banknotes/polymer/carbon-footprint-assessment.pdf?la=en&hash=A2077D4BEF302DF8F8488503DEA041876627ECBD>

² I will use CO₂e, or carbon dioxide equivalent as the standard unit to measure carbon footprint, so emissions of other fossil fuels e.g. methane are converted into equivalent units of carbon dioxide emission

³ From Bank of England statistics: <https://www.bankofengland.co.uk/statistics/banknote>

Carbon footprint of 1000 £10 notes	436kg CO2e
Carbon footprint of 1 £10 note	436g CO2e
Carbon footprint of spending £1 (bank note, 10 years)	43.6g CO2e
Carbon footprint of spending £1 (bank note, 1 year) ⁴	4.36g CO2e

b.) Bank transactions

A Dutch study on the environmental impact of debit cards found 75% of their carbon footprint came from the running of payment terminals, 15% from physical production and 11% from running datacentres that allow them to function (ignoring the carbon footprint of holding money with a bank – this will be considered in the savings section). This led to an average carbon footprint from a debit card transaction of 3.8g CO2e.⁵ As the Dutch economy is about as developed as the UK economy, I will assume this figure also holds in the UK.

Carbon footprint of physical money/£1/year	4.36g CO2e
Carbon footprint of debit card transaction	3.8 g CO2e

Under these calculations, using a debit card carries a slightly lower carbon footprint, although this is well within the margin of error so should not be taken as absolute fact. Reductions in carbon footprint for both cash and card transactions could be achieved by using renewable energy at ATMs, hybrid trucks or reducing the number of ATMs. These are institutional changes that are beyond the consumer’s control, bar perhaps lobbying banks to adopt the changes.

c.) Online or cashless transactions

This area has not yet seen the same detailed research into carbon emissions as cash and card payments have.⁶ However, to pay online or through cashless apps such as Apple Pay, one needs to run a smartphone or laptop that is connected to the internet. Thus, the carbon footprint of the physical gadget, the charging of the gadget and the data centres and infrastructure necessary to connect the gadget to the internet, must be considered.

⁴ This is very close to the figure obtained by a similar study in the Netherlands – they reached a result of 4.6g CO2e - https://www.dnb.nl/binaries/Working%20paper%20No.%20610_tcm46-379441.pdf

⁵ https://www.dnb.nl/binaries/Working%20paper%20No.%20610_tcm46-379441.pdf

⁶ Some interesting thinking is underway on the topic however: <https://www.greenjournal.co.uk/2019/02/ecology-the-carbon-footprint-of-the-new-means-of-payment/> and <https://www.theguardian.com/environment/2010/aug/12/carbon-footprint-internet> for example

Furthermore, buying anything physical online tends to incur a higher carbon footprint than buying it in person as the delivery process, with the transport and extra packaging that it entails, significantly increases the carbon emissions entailed by the purchase.

Although this process of payment cannot be empirically compared, delivery alone will likely make in person transactions, whether through cash or card, far lower in carbon emissions.

The carbon footprint of goods and services

This is not the main focus of this research but should be noted as the decision of what to buy has a far greater impact on carbon footprint than the decision of how to buy it. This is because money can fund projects that alleviate climate change, or directly contribute to the activities worsening climate change. According to 'How Bad are Bananas?' by Mike Berners-Lee, the carbon footprint of spending £1 can vary from -330kg CO₂e (funding a rainforest preservation project) to over 10kg CO₂e (budget airline flights).

Overall results and conclusions

- The decision of what money is spent on is far more significant in determining carbon footprint than the process of payment
- Nevertheless, the process of payment does generate emissions, mainly from the running of ATMs or payment terminals – as these are switched on but idle most of the time, their carbon emissions build up quickly.
- Debit card transactions have a slightly smaller carbon footprint than the average cash transaction – this may not hold for individual types of cash, and due to the magnitude of the figures should not be taken as absolute fact.
- The impact of online transactions is as yet undetermined – however, the carbon footprint incurred from devices connected to the internet, and the delivery process, is likely to make this payment method fairly carbon intensive.
- There is little individual action that can be taken to reduce the carbon footprint of spending money in a certain way, as standard institutional practises determine the carbon emissions produced rather than decisions particular to any specific institution.

The carbon footprint of saving

Holding money in a savings account produces carbon emissions in two ways. Firstly, in order to run the account, the bank needs workers, offices, technology etc. – this produces **operational emissions**. Secondly, by holding money with a particular bank, you allow that bank to finance projects that may lead to carbon emissions – this produces **financed emissions**. An estimated 99% of the carbon footprint of a saving account comes from these financed emissions.⁷

Operational emissions

Opening a savings account with a bank gives that bank a reason to exist. It also produces administrative work for the bank. Thus, the branches, offices, terminals and workers of the bank are made necessary, and the carbon footprint each of these produces can in part be traced to the decision to open a saving account.

However, as mentioned, these emissions account for 1% of the total emissions associated with a savings account. This means much less research has been done into their magnitude.⁸ Therefore, I will continue in this tradition and count operational emissions as negligible *in the case of savings accounts*.

Financed emissions

Banks use the money they hold to give loans out to projects they deem likely to bring a return. In many cases, these projects are carbon intensive, as the main aim will be to maximise profit for the bank by choosing projects likely to make the biggest return. The environmental costs such projects incur are an externality that won't be picked up by this profit calculation.

The following data is taken from a report commissioned by the Rainforest Action Network into the carbon footprint of holding \$10,000 in a savings account with each major Canadian

⁷ From an investigation into the environmental impacts of Canadian banks:

https://www.banktrack.org/download/financing_global_warming_canadian_banks_and_fossil_fuels/ran_canadian_banks_rpt_5.pdf

⁸ This is not to say research has not been done into total operational emissions; many banks have produced reports on the subject - <https://www.rbs.com/rbs/sustainable-banking/environment/operational-environmental-footprint.html>, <https://www.hsbc.com/our-approach/building-a-sustainable-future/sustainable-operations> for example. However, these reports don't consider the portion of these emissions that can be traced to savings activity. Simply holding an account will be far less carbon intensive than, for example, taking out a loan – the administration created is far smaller. Therefore, these figures can't be used to get an accurate view of the size of operational emissions for savings.

bank.⁹ As the Canadian economy is not dissimilar to the UK economy, this should give a useful idea of the situation in the UK as well.

Size of bank in terms of assets	Carbon footprint of holding \$10,000 in a savings account
1	1120kg CO2e
2	970kg CO2e
3	1430kg CO2e
4	1070kg CO2e
5	1160kg CO2e
Average for 5 largest banks	1150kg CO2e

Largest cooperative financial group	40kg CO2e
Largest credit union	<1kg CO2e

A co-operative financial group is owned and operated by its members.¹⁰ Thus, if there is support among the members for greener internal policies, the bank is very likely to implement such policies. As co-operatives are established on the principles of sustainable development and social justice, it follows that their financed emissions are lower; socially conscious considerations have always been built into their function.

A credit union is a type of financial cooperative, normally based in a community and based on the principle of serving people, not profit. Again, the lower associated carbon footprint reflects this differing goal.

It should also be noted that cooperatives as a whole tend to be smaller than banks. Thus, they are practically less able to finance larger carbon intensive projects.

At the time of publishing, \$10,000 (Canadian) would have been equivalent to about £5414.19¹¹.

CO2e of holding £1 in a major bank	212g CO2e
CO2e of holding £1 in a cooperative financial group	7.39g CO2e
CO2e of holding £1 in a credit union	Negligible

⁹ The full report can be viewed here:

https://www.banktrack.org/download/financing_global_warming_canadian_banks_and_fossil_fuels/ran_canadian_banks_rpt_5.pdf

¹⁰ In practise, this often means members electing board members etc. As the future of those running the bank thus relies on the support of members, decisions are made with more thought given to members.

¹¹ Using an average figure for converting between CAD and GBP in the month the report was published, conversion data from <https://www.poundsterlinglive.com/bank-of-england-spot/historical-spot-exchange-rates/qbp/GBP-to-CAD-2008>

Conclusions

- The decision of which bank to hold a savings account with makes a large difference to the carbon footprint incurred by holding money in that savings account.
- This is because carbon emissions and wider environmental damage are externalities. The costs incurred are not monetarily accounted for in the project's profit calculations, and so can be ignored. Picking a cooperative bank, credit union or a bank that adds extra environmental considerations when choosing projects effectively internalises the externality by introducing considerations beyond profit maximisation.
- Even within mainstream banks, there can be a lot of variation in terms of financed emissions. This suggests becoming more environmentally friendly does not have to come at the price of success – the second largest Canadian bank has a lower footprint from financed emissions than the three smaller mainstream banks considered.
- Cooperatives and credit unions, whose aim is not pure profit, and thus who consider the social impact of projects as well as their profit potential, have far smaller carbon footprints than mainstream banks.

The carbon footprint of investing

Money can be invested into assets – **an asset** is something owned by an economic agent that has value and could be converted into money. Most people’s major asset is their house, invested into via their mortgage.

Investment portfolios are financial assets. They consist of stocks and bonds held across different companies and projects that are expected to grow in value. A certain share of the profits earned by these companies and projects is given to those with a stake in the portfolio. Traditionally, the sole focus is profit, so as observed before, environmental impacts become an externality and thus investment portfolios often have a large carbon footprint.

The carbon footprint of mortgages

Taking out a mortgage allows the financial industry to survive and grow. Therefore, you are partially responsible for the carbon footprint of their offices and workers, and fully responsible for the carbon footprint from data entry, storage and processing, including any correspondence concerning the mortgage.

In his book ‘How Bad are Bananas?’, Mike Berners-Lee estimates the carbon footprint per £1 spent on UK financial services, considering a £100,000 mortgage at 5% as the main example of this, to be around 160g CO₂e.¹²

There are some less carbon intensive options available for mortgages. Companies such as the Ecology Building Society specifically offer eco-friendly mortgages for new-build homes built to reduce their environmental impact, as well as offering mortgages for renovations and conversions to reduce carbon footprint.¹³ However, this is a niche option, requiring a relatively high level of commitment from the individual taking out the mortgage.

The carbon footprint of investments

Traditional investment portfolios often include projects heavily linked to fossil fuels. A report commissioned by the German Federal Ministry for the Environment found that a

¹² This figure was derived in 2010 – it will have changed due to inflation, and new processes with new environmental impacts. However, as Berners-Lee refers to it as a ballpark figure, it was unlikely to be 100% accurate even when the book was first published but continues to provide a respectable estimate.

¹³ More information can be found here: <https://www.ecology.co.uk/mortgages/>

€10,000 investment in a conventional portfolio, with no environmental consideration applied, would co-finance five tons of greenhouse gas emissions.^{14 15}

The exact carbon footprint of investing in a portfolio will depend on the specific contents of that portfolio. A report by BNP Paribas Asset Management, an asset manager that aims to invest responsibly, into their portfolio options revealed carbon footprints from 396.75kg CO2e per €100 invested to 0.13kg CO2e per €100 invested.¹⁶ Such reports are often not available for (presumably) higher carbon investment funds offered by mainstream companies – if any environmental information is available, it is often very vague and not particularly reliable.

In order to facilitate a rough comparison between options, I will take the German government figure to be the carbon footprint of the average traditional fund, and an average of the BNP Paribas figures to be the carbon footprint of an average ethical fund.

The average conversion rate between the euro and the pound at the time of writing is 0.87.¹⁷

Emissions from investing £8700 in a traditional portfolio	5000kg
Emissions from investing £1 in a traditional portfolio (Adelphi)	>0.575kg
CO2e from investing £87 in a median ethical portfolio (Paribas)	12.6kg
CO2e from investing £1 in a median ethical portfolio	0.142kg
CO2e from investing £1 in the lowest carbon ethical portfolio	1.49g

Investing in carbon offset projects

Carbon offsetting schemes aim to compensate for some of one’s carbon emissions by reducing carbon emissions in other areas. The schemes fund projects with a negative carbon footprint, that remove existing emissions or reduce future emissions.

I will not be counting this as an investment, as the principal aim of carbon offsetting is not to get a monetary return, whilst the aim of ethical investment more generally is still to make

¹⁴ This is not in CO2e, however figures for traditional funds are hard to find, and the figure itself is well researched - <https://www.adelphi.de/en/project/carbon-footprint-capital-investments>

¹⁵ Co-financing refers to the fact that many people need to have a stake in that investment portfolio for the project to actually go ahead

¹⁶ This is based on direct and indirect emissions from companies - <https://www.bnpparibas-am.lu/intermediary-fund-selector/the-asset-manager-for-a-changing-world/carbon-footprint/>

¹⁷ Using data from <https://www.xe.com/currencyconverter/convert/?Amount=1&From=EUR&To=GBP>

a profit, just under the socially conscious conditions applied. Therefore, I will consider carbon offsetting to be a purchase, with the good purchased being the reduction in carbon.

As mentioned in the spending section of the report, good examples of carbon offsetting projects can lead to £1 reducing CO₂e emissions by 330kg.

Comparing the carbon footprint of monetary decisions

Putting £1 towards...	Will (on average) result in a carbon footprint of...
A good carbon offset scheme	-330kg CO ₂ e
A credit union savings account	Negligible
The lowest carbon ethical investment portfolios	1.49g CO ₂ e
Any card purchase	3.8g CO ₂ e
Any cash purchase	4.36g CO ₂ e
A cooperative savings account	7.39g CO ₂ e
A median ethical investment portfolio	142g CO ₂ e
A traditional mortgage	160g CO ₂ e
A mainstream savings account	212g CO ₂ e
A traditional investment portfolio	>575g emissions

This research has uncovered two main points:

- 1.) The decision of what to spend money on is not the sole determinant of the carbon footprint that money will incur; saved or invested money is not carbon neutral.

In some cases, the carbon released will be negligible, however when larger sums of money are involved, the resultant carbon footprints can swell to be rather large. This should be considered when financial decisions are being made.

- 2.) Choosing ethical financial products can hugely reduce the carbon footprint of financial activity

Empirical data has shown that the decision to save or invest ethically can reduce your carbon footprint by huge magnitudes. Therefore, taking environmental concerns into account when making financial decisions can be a great step towards reducing your environmental impact.

The next section of this report will focus on how exactly ethical versions of saving and investing work, and whether we can evaluate the true environmental impact of these funds accurately.

ESG criteria and environmental standards in finance

Choosing a financial product with an ethical screening process, rather than a financial product based solely around profit, can significantly reduce your carbon footprint. However, the degree of reduction will depend on the rigour of the applied screening process. This section will focus on the common screening processes, and independent evaluators of products applying these screening processes.

ESG Criteria

Ethical financial products often employ a screening process for potential investments based around a set of **environmental, social and governance criteria (ESG criteria)**. The three aspects cover the main considerations of a socially conscious operation.¹⁸

Environmental – the environmental costs incurred by a company, and how well these are managed; how responsibly the company acts as a steward of nature

Social – how well the company manages its internal relationships, and relationships with any communities it interacts with

Governance – how fairly the company is governed; usually focused around executive pay, shareholders' rights, audits, corruption, board composition, whistle blowers etc.

ESG criteria are not solely environmentally focused, instead being used to push for ethical behaviour on all fronts. This is useful in several ways. The environmental and social aspects overlap heavily – managing environmental risks requires managing relationships with those affected by the environmental risks. Requiring a company to be socially responsible ensures this is not glossed over. Furthermore, both the social and governance aspects ensure environmental progress is made without exploitation in other areas developing as a side effect.

However, it can complicate matters when trying to evaluate companies specifically on their environmental performance. Nevertheless, it is extremely unlikely to see a solely

¹⁸ The following explanations of the main focus of each aspect comes from the UK Government's guidance on what qualifies as ESG criteria:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/835214/Sep_2019_bulletin.pdf

environmentally focused screening process applied. The best option for finding a green financial product is to find a company employing strong ESG criteria.

Negative and positive criteria

There are normally two stages to an ESG screening process. In order to illustrate these stages, I will refer to the screening process used by the Rathbone Ethical Bond Fund (REBF), as it provides a particularly clear example.¹⁹

The first stage employed is a screening against a set of **negative criteria**.

If a company meets any of these negative criteria, it will be ruled out as a potential investment. Each criterion acts as a red line – they will not be tolerated by investors.

In the REBF screening process, material involvement in mineral extraction, fossil fuel exploration or production, and unsustainable sourcing of raw materials are negative criteria. Convictions for serious or persistent pollution offences is also a negative criterion.

Essentially, companies causing active harm to the environment are excluded.

As illustrated in the REBF policy, negative criteria often specify a maximum amount of involvement in barred activities or industries – for REBF, this is not specified exactly, but in the Royal London Ethical Bond Fund for example, companies must not draw any more than 10% of their revenue from barred activities or industries.²⁰ Stronger screening processes will have lower thresholds, and will also likely have stricter, more defined thresholds. Higher or vaguer thresholds open the possibility for some environmentally damaging practises to be allowed through the screening process.

The second stage employed is a screening against a set of **positive criteria**.

A company must meet a certain number of positive criteria in order to be considered as a potential investment. Each criterion is a deliberate action on the part of the company that will benefit the environment.

In the REBF screening process, a published clearly defined policy for managing environmental impacts is a positive criterion; this involves monitoring and reporting on progress in areas such as waste, resource consumption, air and water pollution, and recycling.

¹⁹ The full screening process can be found here: https://www.rathbonefunds.com/sites/default/rutm-files/literature-files/6391_rathbone_ethical_bond_fund_criteria_final.pdf

²⁰The full policy can be found here: <http://www.rlam.co.uk/Home/Institutional-Investor/our-capabilities/Fixed-Income/OEICs/Ethical-Bond-Fund/>

Thus, companies cannot get through the process without taking active steps towards becoming an environmentally friendly operation.

Are ESG criteria profitable?

In a survey from early 2020, Triodos found that three in ten people would avoid investing in ethical funds because they believed the returns would be lower than those from a traditional fund.²¹

Whilst ethical investments can cost some returns, not all of the data supports this conclusion. The FTSE4Good US Index returned 155% from 2013 to 2018, whilst the S&P 500 (the best representation of the US stock market as a whole) returned 129% over the same period.²² This is not to say ethical investment is bound to be more profitable. The FTSE4Good UK Index returned 134% from 2008-2018, compared to returns of 136% from the FTSE All Share Index.²³ Furthermore, once the data is disaggregated to look at the performance of individual funds, ethical funds are rarely the very best performing funds – in the last ten years, Standard Life Investments UK Ethical fund is the only ethical fund to make it in the top 20 best performing funds in the UK, and was not among the highest performers on this list.²⁴ One potential explanation for this is that the governance criteria applied will weed out companies that take a lot of risks; investments in such companies are likely to be volatile, potentially bringing huge returns but also risking huge losses.

Therefore, whilst ethical investing may not bring the biggest possible returns, it will tend to be a more stable option, and thanks to the sustainability criteria applied, will also allow for longer term investing.²⁵

How useful are ESG criteria?

ESG criteria can be very useful to the consumer, as well as acting to stimulate wider change:

- **ESG criteria introduce standards beyond profitability** – environmental costs are no longer an externality, they are factored into the decision to invest; this brings companies closer to environmental full cost accounting, wherein all costs, direct and indirect, are considered in the profit calculation²⁶

²¹ <https://www.triodos.co.uk/articles/2019/its-not-for-serious-investors-seven-myths-of-ethical-investing-busted>

²² <https://www.thisismoney.co.uk/money/investing/article-6227207/Does-ethical-investing-really-make-money.html>

²³ *Ibid*

²⁴ *Ibid*

²⁵ Further analysis on the pros and cons of ethical investment can be found here: <https://www.unbiased.co.uk/life/managing-your-money/ethical-investing>

²⁶ A more detailed explanation of environmental full cost accounting can be found here: <http://www.fao.org/nr/sustainability/full-cost-accounting/en/>

- **ESG criteria are clearly defined, and evidence based** – companies must demonstrate they do not meet negative criteria and do meet positive criteria. They cannot hide behind vague statements about taking action.
- **Negative ESG criteria identify environmental red flags** – strong negative criteria will pick out bad actors, and expose the actions requiring their exclusion
- **Positive ESG criteria prevent stagnation** – companies must work towards being better, they can't just ignore their environmental impact
- **Failed audits can act to shame companies** – they provide material proof of a company's environmental flaws. Furthermore, their exclusion from an ethically focused scheme could damage their reputation and thus provoke change.
- **ESG criteria are widely recognised and used** – this encourages further companies to take them up, and makes it harder for very weak ESG criteria to remain in place due to pressure from competitors employing stronger screening processes

However, ESG criteria are also far from perfect:

- **ESG criteria can be weak** - companies involved in activities causing active harm to the environment can be allowed through the screening process on technicalities; four out of ten of Aberdeen Responsible UK Equity Fund's top holdings were fossil fuel companies, making up 16% of the fund's total holdings before a report into ethical funds exposed these holdings²⁷
- **ESG criteria can be used to greenwash**²⁸ – weak ESG criteria as above aren't immediately identifiable, so companies can gain the positive PR from appearing to act to protect the environment without actually taking action
- **Some companies employ only negative criteria** – this allows companies to stagnate instead of working towards environmental neutrality
- **ESG criteria are not standardised** – this means results are hard to compare between companies, and can act as a deterrent to consumers and companies taking them seriously as a measure²⁹

Therefore, while a company employing ESG criteria to screen investments is a good sign, it can't be taken as proof they are an environmentally friendly operation.

²⁷ <https://www.theguardian.com/money/2014/oct/18/ethical-funds-coal-oil-gas-barchester-green>

²⁸ A history of the practise of greenwashing, and its evolution over time, can be found here: <https://www.theguardian.com/sustainable-business/2016/aug/20/greenwashing-environmentalism-lies-companies>

²⁹ Empirical proof of this challenge can be found here: <https://www.bloomberg.com/news/articles/2019-12-11/conflicting-esg-ratings-are-confusing-sustainable-investors> - it is less of an issue for environmental measures, but still contributes towards the instability of ESG criteria

Environmental standards in finance

As mentioned, there is no standard set of ESG criteria that is used by all or most companies. However, there are some ranking systems that can be used to compare between ethical funds.

The most prominent standard in the UK is the Ethical Accreditation scheme run by the Ethical Company Organisation. They rank companies operating in each economic sector against their Ethical Company Index. The top 33% are eligible for **Ethical Accreditation**. In order to receive this accreditation, the company must then go through a more in-depth audit by the Ethical Company Organisation.³⁰



As audits are performed by an independent company, potential issues are less likely to be brushed over. However, the scheme is not too widely known, and participation is voluntary. Thus, it is more useful to prove the ethical standards of individual companies rather than as a comparison between all potential options.



Another useful standard is **B Corp certification**. A B Corporation should focus on creating a sustainable and inclusive economy, rather than just chasing profit. In order to become certified, companies must achieve a certain score on the B Impact Assessment, an audit into their impact on workers, communities, customers and the environment. If they score sufficiently well, their assessment must be publicly released, and the company's governing documents must be amended to mandate their board of directors to balance profit and ethics. Reviews are randomly conducted on already certified corporations to make sure this is upheld.³¹

As a global standard, B Corp certification is more well-known and more developed than the Ethical Accreditation Scheme. However, it is also voluntary, and not particularly useful for comparisons. However, if a company achieves accreditation, the legal mandate to consider environmental impact and the spot checks after accreditation make B Corp Accreditation a very useful way to determine if a company's ethical claims are legitimate.

³⁰ More information on the process can be found here: <https://ethical-company-organisation.org/accreditation>

³¹ More information on the process can be found here: <https://bcorporation.uk/certification>

It is important to research the legitimacy of an ethical standard before using it to make a decision. The **Equator Principles** claim to be a risk management framework for investors that accounts for environmental costs.³² However, there are significant loopholes and blind spots in the principles that allowed thirteen banks who had signed the principles to finance the Dakota access pipeline.³³ The principles have since been updated, however concerns remain on their rigidity.



There may be hope for standardised ESG standards in the future; the EU has been working towards developing a system of evaluation for existing standards, in the hope of encouraging companies to adopt less individualised policies.³⁴ Part of this involves introducing regular reporting of the ethical criteria being employed. Similar standards have been rejected by the US Congress, however.³⁵

For now, there is no definitive ranking of ethical screening processes which can be used to compare products. The next section of this report will therefore focus on ways the consumer can gather information on the environmental impacts of their financial choices.

Conclusions

- Companies adopting ESG criteria to screen their investments are more likely to account for the environmental costs of financing a project, and thus choosing their financial product is likely to result in a lower carbon footprint
- However, ESG criteria are far from perfect. Many include loopholes and blind spots that mean environmentally harmful projects can still be financed.
- There is no definitive standard for ESG criteria, though there are some good voluntary schemes that require a more robust commitment to environmental protection in order to gain accreditation – companies holding accreditation are likely to be among those with the smallest carbon footprint.
- ESG screening is growing in prominence, and there are some attempts in motion to make ESG criteria more transparent and standardised, most notably within the EU.

³² The current iteration can be found here: <https://equator-principles.com>

³³ For information on the funding of the pipeline: <http://www.ethicalcorp.com/why-banks-need-plug-gaps-equator-principles-prevent-community-conflict> and for information on the environmental damage of the pipeline: <https://theintercept.com/2018/01/09/dakota-access-pipeline-leak-energy-transfer-partners/>

³⁴ Current progress on this can be found here: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en

³⁵ <https://www.ft.com/content/0dd92570-a47b-11e9-974c-ad1c6ab5efd1>

Evaluating ethical saving and investing options

It can be difficult to determine the exact carbon footprint of different financial products, as clear information is often not readily available. However, there are resources designed to help with this decision, and there are common signs as to which companies are the most trustworthy in terms of environmental stewardship.

Ethical saving

An environmentally friendly savings account will be held with a bank that does not finance carbon-intensive projects – banks do not usually offer ‘traditional’ and ‘ethical’ saving options.

Ethical Consumer is a consumer activist organisation that produces annual rankings of the most ethical savings accounts available. Companies are ranked either 0, 0.5 or 1 on a series of negative criteria in the areas of the environment, animals, people and politics, alongside positive criteria in company ethos and product sustainability.³⁶



This is a very useful tool. It introduces some nuance, as companies don’t have to be ranked as entirely succeeding or entirely failing on dealing with an issue. The breakdown of rankings in different areas is released by Ethical Consumer, so consumers can choose to focus on certain criteria they especially care about if they want. It is also conducted regularly, so up to date information is available and a company’s history can also be checked.



As a result of their evaluations, Ethical Consumer recommended three banks: **Ecology Building Society**, **Triodos Bank** and **Charity Bank**. None of these banks were marked down for any negative criteria, and each scored at least half marks for the positive criteria of company ethos and an ethical lending policy. **The Co-operative Bank** is the only other bank considered to have an ethical lending policy.³⁷

³⁶ More information can be found here: <https://www.ethicalconsumer.org/money-finance/shopping-guide/savings-accounts>

³⁷ A shortcut to the full rankings, also available through the above website, can be found here: <https://charitybank.org/news/charity-bank-ranked-top-ethical-savings-account-in-uk>

These results, when viewed as part of the entire ranking list, point to several key trends that can act as a rule of thumb when choosing financial products:

BRAND	EthiScore (out of 20)	Environment					Animals					People					Politics					+ve	COMPANY GROUP
		Environmental Reporting	Climate Change	Pollution & Toxics	Habitats & Resources	Palm Oil	Animal Testing	Factory Farming	Animal Rights	Human Rights	Workers' Rights	Supply Chain Management	Irresponsible Marketing	Arms & Military Supply	Controversial Technologies	Boycott Call	Political Activity	Anti-Social Finance	Company Ethos	Product Sustainability			
Charity Bank [E+]	16																			★ 1	Charity Bank Ltd		
Ecology BS savings only [E]	15.5																			★ 0.5	Ecology Building Society		
Triodos Bank [E+]	15.5																			☆ 1	SAAT		
Leeds Building Society	14	○																		☆	Leeds Building Society		
Coventry Building Society	13.5	●																		☆	Coventry Building Society		
Cumberland Building Society	13.5	●																		☆	Cumberland Building Society		
Nationwide Building Society	13.5	○														○				☆	Nationwide Building Society		
Newcastle Building Society	13.5	●																		☆	Newcastle Building Society		
Principality Building Society	13.5	●																		☆	Principality Building Society		
Skipton Building Society	13.5	●																		☆	Skipton Building Society		
West Bromwich Building Soc	13.5	●																		☆	West Bromwich Building Soc		
Chelsea Building Society	12.5	●										○						○		☆	Yorkshire Building Society		
Clydesdale/Yorkshire Bank	12.5	○																●			CYBG plc		
Metro Bank	12.5	●																○			Metro Bank Plc		
Norwich & Peterborough BS	12.5	●										○						○	☆		Yorkshire Building Society		
Yorkshire Building Society	12.5	●										○						○	☆		Yorkshire Building Society		
Co-operative Bank/Smile [E]	12	●								○								●		0.5	Co-operative Bank Plc		
Al Rayan Bank	11.5	●	○						○	○											Masraf Al Rayan Q.S.C.		
Kent Reliance	11.5	●								○			○						○		OneSavings Bank/OSB		
ICICI Bank savings only	6.5	●	●	●	●				●			●						●	○		ICICI Bank		
Virgin Money	6.5	●	○	○	○			○	○	○	○	○	○					●			Virgin Group Holdings		
Handelsbanken	5.5	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Svenska Handelsbanken AB		
Bank of Scotland	5	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Lloyds Banking Group Plc		
Birmingham Midshires	5	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Lloyds Banking Group Plc		
Halifax	5	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Lloyds Banking Group Plc		
Lloyds, Scottish Widows	5	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Lloyds Banking Group Plc		
Santander	5		●	○	○		○	○	○	○	○	○	○	○	○	○	○	○	○	●	Banco Santander SA		
Zurich Cash ISAs only	5		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Zurich Insurance Group		
Bank of Ireland savings only	4.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Bank of Ireland		
Danske Bank	4.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Danske Bank A/S/Møller Fdtn		
TSB	4.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Banco de Sabadell SA		
Citibank savings only	3.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Citigroup Inc		
Barclays	3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Barclays Plc		
HSBC, First Direct	3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	HSBC Holdings Plc		
Post Office	2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Bank of Ireland/UK Govt		
Sainsbury's Bank	2.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	J Sainsbury plc		
Coutts/Ulster Bank	2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	RBS/UK Government		
NatWest	2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	RBS/UK Government		
RBS	2	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	RBS/UK Government		
M&S Money	1.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	HSBC Holdings/M&S Group		
Tesco	0.5	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	●	Tesco Plc		

See all the research behind these ratings together on www.ethicalconsumer.org. Free to subscribers.
 [E] = ethical lending policy [E+] = ethical lending policy plus full, public list of investments

USING THE TABLES

EthiScore: the higher the score, the better the company across the criticism categories.
 ● = bottom rating,
 ○ = middle rating,
 empty = top rating (no criticisms).

USING THE TABLES

Positive ratings (+ve):
 ★ = full mark,
 ☆ = half mark.
 ● = Product Sustainability: Maximum of five positive marks.

- The most environmentally friendly option is to bank with an institution established in order to provide an ethical banking option – Charity Bank, the Ecology Building Society and Triodos are not mainstream banks adapting to become more ethical, they were set up as alternatives to mainstream banks. In fact, company ethos is a reliable indicator for the most environmentally friendly options.
- Building societies tend to be more environmentally friendly than traditional banks. This may be because 75% of a building society's assets must be held in residential property mortgages.³⁸ This offers far less capital to invest in potentially high carbon projects. Furthermore, the management structure of a building society is more community focused, and thus more likely to result in ethical decision making.

These rankings are not definitive, and the ranking process will not be perfect. The ranking system will obscure some key details and doesn't help particularly with differentiating between the lower rated banks.³⁹ However, the system is open, with the option to disaggregate data to look specifically at environmental rankings, and all analysis is conducted by an established, independent organisation to a depth beyond what the average consumer would be capable of. Therefore, the Ethical Consumer ranking list is the best option for a consumer wanting to choose a less carbon intensive savings account.

Ethical investing

There is not a similar evaluation of ethical investing schemes available, most likely due to the far greater volume of investment funds available and the fact that far fewer people hold money in investments than hold savings accounts.

There are some rankings available, but these tend to be either one-off articles (this ranking in the tradition of Barchester Green's now disbanded annual rankings - <https://www.castlefield.com/news-media/blog/ethical-and-environmental-funds-heroes-and-villains/>) or focused mainly around the profitability of investing in certain funds (this ranking identifying the ethical options from Money Observer's full Rated Funds list - <https://www.moneyobserver.com/portfolio-ideas/ethical-fund-choices-money-observer-2020-rated-funds-list>). More are available through an online search.

Thus, it is more up to the consumer to determine the environmental credentials of an investment fund. The same broad lessons from evaluating savings accounts continue to apply. Investment funds set up by companies with an ethos of sustainability are likely more trustworthy than mainstream banks. For example, Triodos investment funds are very open

³⁸ <https://www.ethicalconsumer.org/money-finance/shopping-guide/savings-accounts>

³⁹ *This is not altogether a fault of the system – many mainstream banks have similar operating policies, and many also do not provide much data on the environmental impact of their operations.*

on their screening processes and selection criteria, as well as offering the option to directly invest with specific organisations.⁴⁰

There should be a published policy on the ethical screening process employed by the fund – if not, the ethical credentials of the fund will be completely unsubstantiated. Checking this policy carefully is the best way to determine how environmentally friendly a fund will be. Stricter policies, with lower maximum thresholds on involvement in barred industries such as fossil fuel production for example, will likely have a smaller carbon footprint.

It can also be helpful to see if the fund has been independently evaluated at all, and to check how long the fund has been established. A fund claiming to be ethical but failing will eventually be found out, as evaluations such as the Barchester Green one mentioned above continue to be carried out.

Finally, the most popular ethical funds in the UK can be found here:

<https://www.moneyobserver.com/news/top-10-most-popular-ethical-funds-2019>. An investment in any of these should provide a decent chance of good returns, and the visibility of the funds should mean that their stated screening processes are legitimate; if any suspicious activity has come to light about one of the funds, it should be available through a quick search.

There cannot be a definitive answer to which is the best or most ethical investment portfolio due to the nature of investments. However, following careful research should allow consumers to identify a fund which suits their priorities well.

Conclusions

- For savings accounts, the most reliable evaluation is conducted by the Ethical Consumer. Their recommendations include banks with a specific ethos of ethical finance, namely Charity Bank, the Ecology Building Society, and Triodos, as well as building societies.
- Investments require more independent evaluation. Again, a company with an ethos of ethical finance is likely to have a robust policy for ethical investment. However, all companies will publish their criteria for investment, and reading these carefully, checking particularly for the thresholds of holdings in barred industries and specific wording around what qualifies as barred activities, is the best way to determine if an investment is truly ethical.
- In terms of profitability, there are many rankings available online, of specifically ethical funds and of the ethical funds present on whole industry rankings.

⁴⁰ More information can be found here: <https://www.triodos.co.uk/ethical-investments>

Overall conclusions

- Choosing an ethical alternative to traditional saving or investing is a great way to cut your carbon footprint. Financed emissions mean traditional saving accounts and investment portfolios can often have very large carbon footprints, whilst the carbon footprint of ethical alternatives is magnitudes smaller.
- Ethical alternatives to traditional investments are unlikely to be the most profitable investments possible, however they are by no means unprofitable and are usually more stable and sustainable.
- There are some excellent resources that can help the consumer compare financial services. However, it is far from simple to properly evaluate the ethical credentials of many companies. For real progress to be made in this area, there will likely have to be some sort of governmental or international regulation in place – there has been some signs of this emerging in the EU.

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